



# City of Petaluma



## Public Hearing: Water & Wastewater Rate Study

August 7, 2023



BARTLE WELLS ASSOCIATES  
INDEPENDENT PUBLIC FINANCE ADVISORS



# Presentation Overview



- Water & Wastewater Rates
- Rate Study Overview
- Financial Challenges
- Projected Rates & Impacts
- LIHWAP Assistance Program
- Water Conservation Program
- Next Steps

**Purpose:** Present summary of recommendations and consider adoption of the proposed rate increases



# Background

- **Water & sewer utilities are financially self-supporting enterprises**
  - Rates are main source of funding and need to be adequate to fund the costs of providing service including operating, maintenance, debt service, & capital improvement needs
- **City serves roughly 20,000 accounts**
  - Residential customers account for over 90% of customers & roughly 2/3rds of water use
- **Water System**
  - Over 270 miles of water pipelines, 11 storage tanks/reservoirs, 9 booster pump stations
  - Water supply mostly imported from Sonoma County Water Agency (SCWA) supplemented by a small amount of groundwater pumped from City wells
- **Wastewater System**
  - Over 190 miles of sewer pipelines, 9 sewer pump stations
  - Wastewater treatment at Ellis Creek Water Recycling Facility
  - Effluent either a) disposed to Petaluma River in winter, or b) treated to higher regulatory standards and used as recycled water for landscape and agricultural irrigation
- **Many facilities are approaching the end of their useful lives and will need to rehabilitated or replaced in future years**

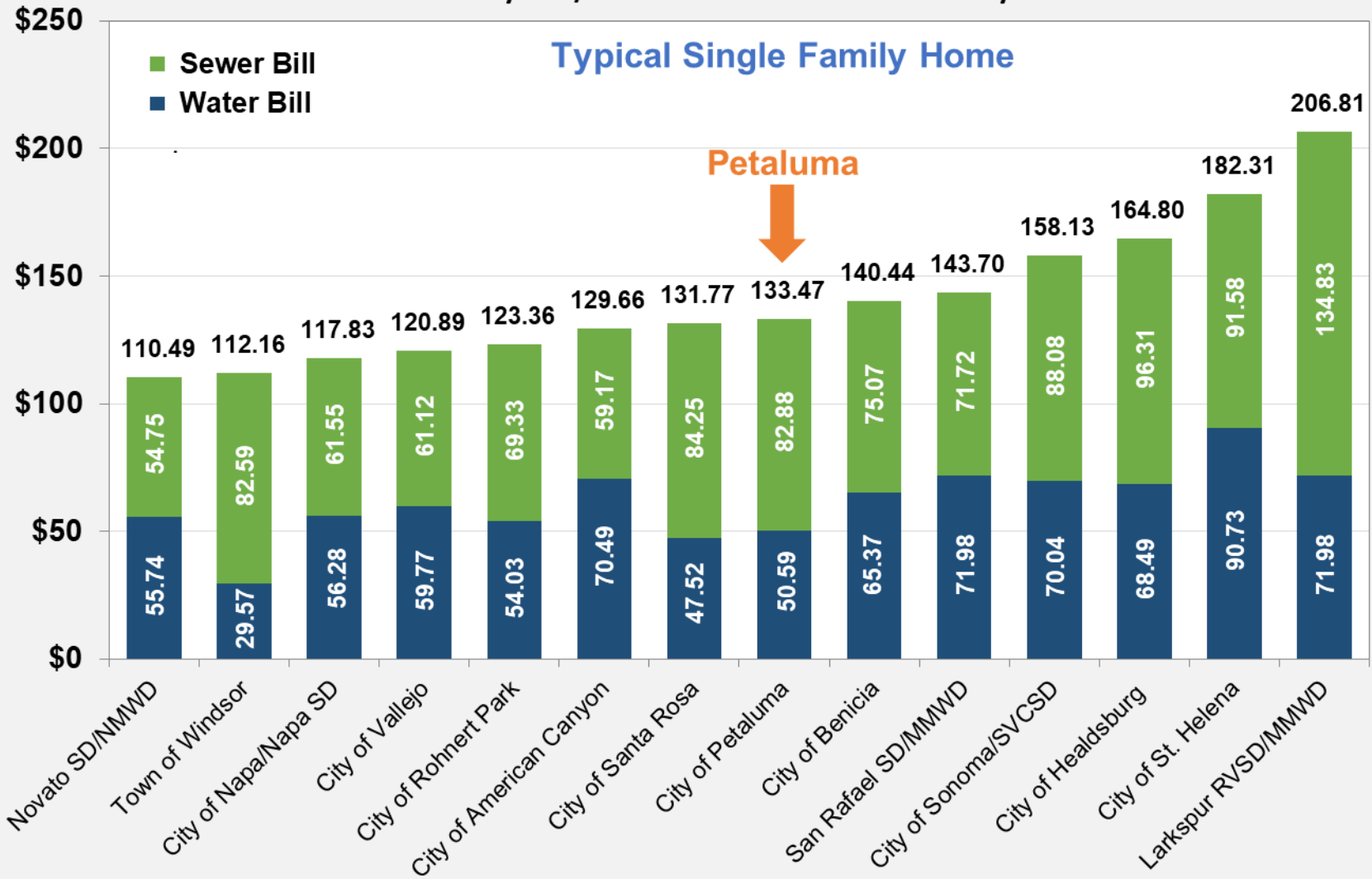


# Water & Sewer Rates

- **City has historically provided strong financial management via adoption of gradual annual rate increases most years**
  - Last adopted a 5-years of rate increase in 2017
  - Also implemented rate structure modifications to better align rates with cost of service
  - Increases were temporarily deferred to provide rate relief during Coronavirus pandemic
- **Typical residential bills are in the middle range based on a regional survey**
  - Water rates in lower range
  - Sewer rates in middle range
  - Bills for low-use customers in lower-middle range
- **Prior rate increases put water & sewer utilities on stronger financial footing**
- **However, both utilities are facing increased costs for operations and capital improvement needs that will require continuation of gradual rate increases**

# Single Family Residential Monthly Water & Wastewater Rate Survey

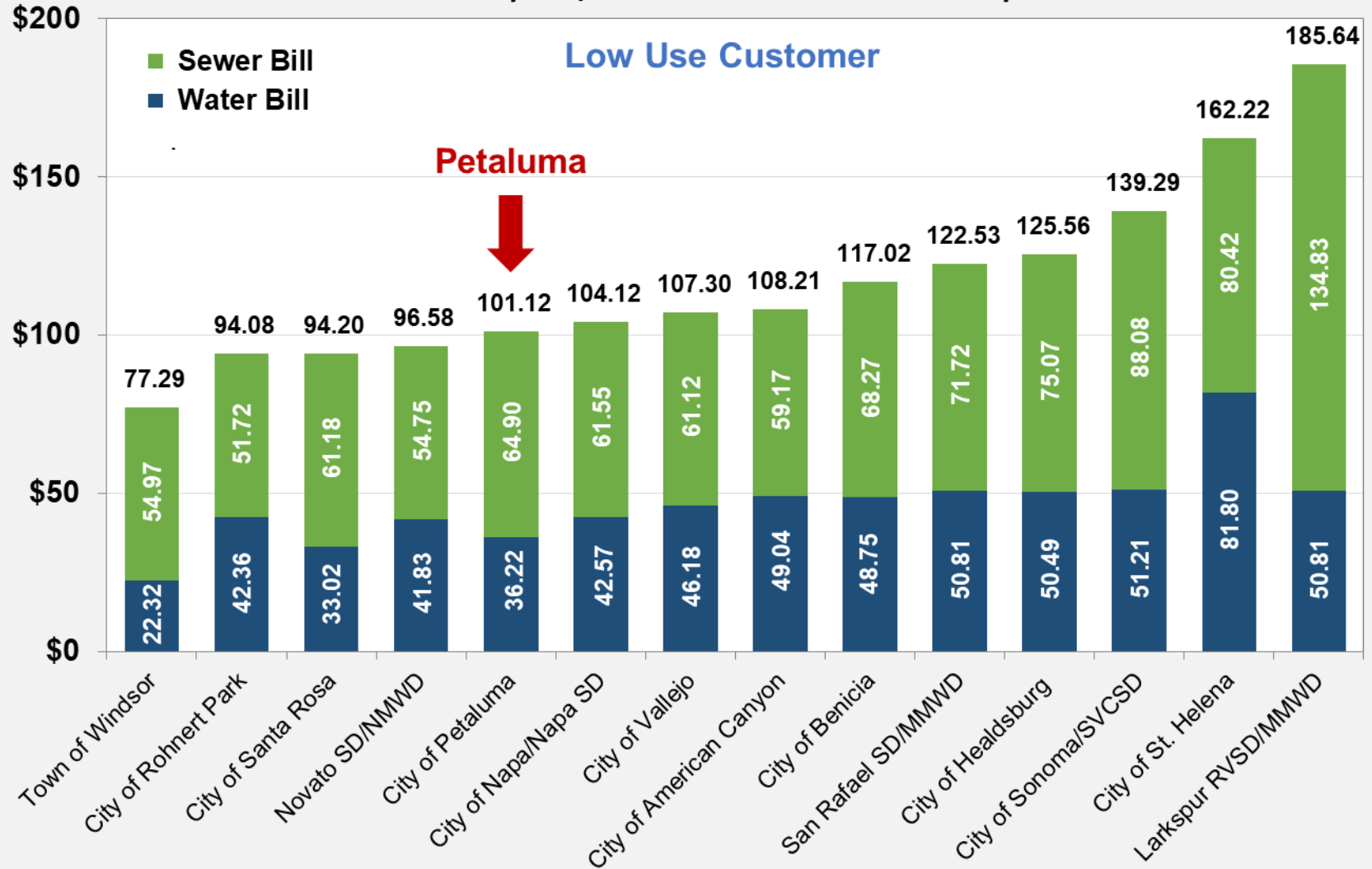
Water: 7 hcf monthly use / Sewer: flat rate or 5 hcf monthly winter use



Rates Effective January 2023

# Single Family Residential Monthly Water & Sewer Rate Survey

Water: 4 hcf monthly use / Sewer: flat rate or 3 hcf monthly winter use



Rates Effective January 2023



# Rate Study Overview

## ■ 10-Year Water & Sewer Financial Plans

- Developed 10-year financial projections to identify future operating, capital, and debt service funding needs for each utility
- Phase in rate increases as gradually as possible to minimize the annual impact on customers



## ■ No modifications to City's water or sewer rate structures proposed

- Prior rate study modified rate structures & realigned rates with cost of service
- Maintain continuity of rate structure; all customers face same rate increases

## ■ Developed new Water Shortage Contingency Plan Rate Adjustments to support financial stability during droughts & water shortages

## ■ Collaborative process with City staff

## ■ Water & sewer enterprises are in good financial shape but face financial challenges that will require gradual annual rate increases





# Financial Challenges

## ■ Capital Improvement Needs of Aging Infrastructure



- Updated Master Plans are in progress & identify substantial funding needs
  - Water Master Plan, Sewer Master Plan, Integrated Water Master Plan (IWMP)
- Purpose: Replace aging infrastructure, address deficiencies, expand recycled water system, and improve water & sewer system reliability to support safe & reliable operations
- Capital improvements have been prioritized & spread over future years to the maximum extent possible
- High-priority capital funding needs over the next five years:
  - **Water: \$54 million** (est. grant funding \$22M; net funding req't = \$33M)
  - **Wastewater: \$70 million** (excludes major future rehab/upgrade of ECWRF)
  - **Recycled Water: \$42 million** (est. grant funding \$19M - \$30M; net funding req't = \$23M)
- City has been very successful in obtaining grant funding (IWMP, Advanced Metering Infrastructure, tertiary wastewater treatment, recycled water system expansion, etc.) and is in process of seeking additional grant funding





# Financial Challenges

## ■ Sonoma County Water Agency (SCWA) Wholesale Water Rate Increases

- SCWA wholesale rates increasing 9.4% effective July 1, 2023
- Projected to increase more than 50% over next 5 years

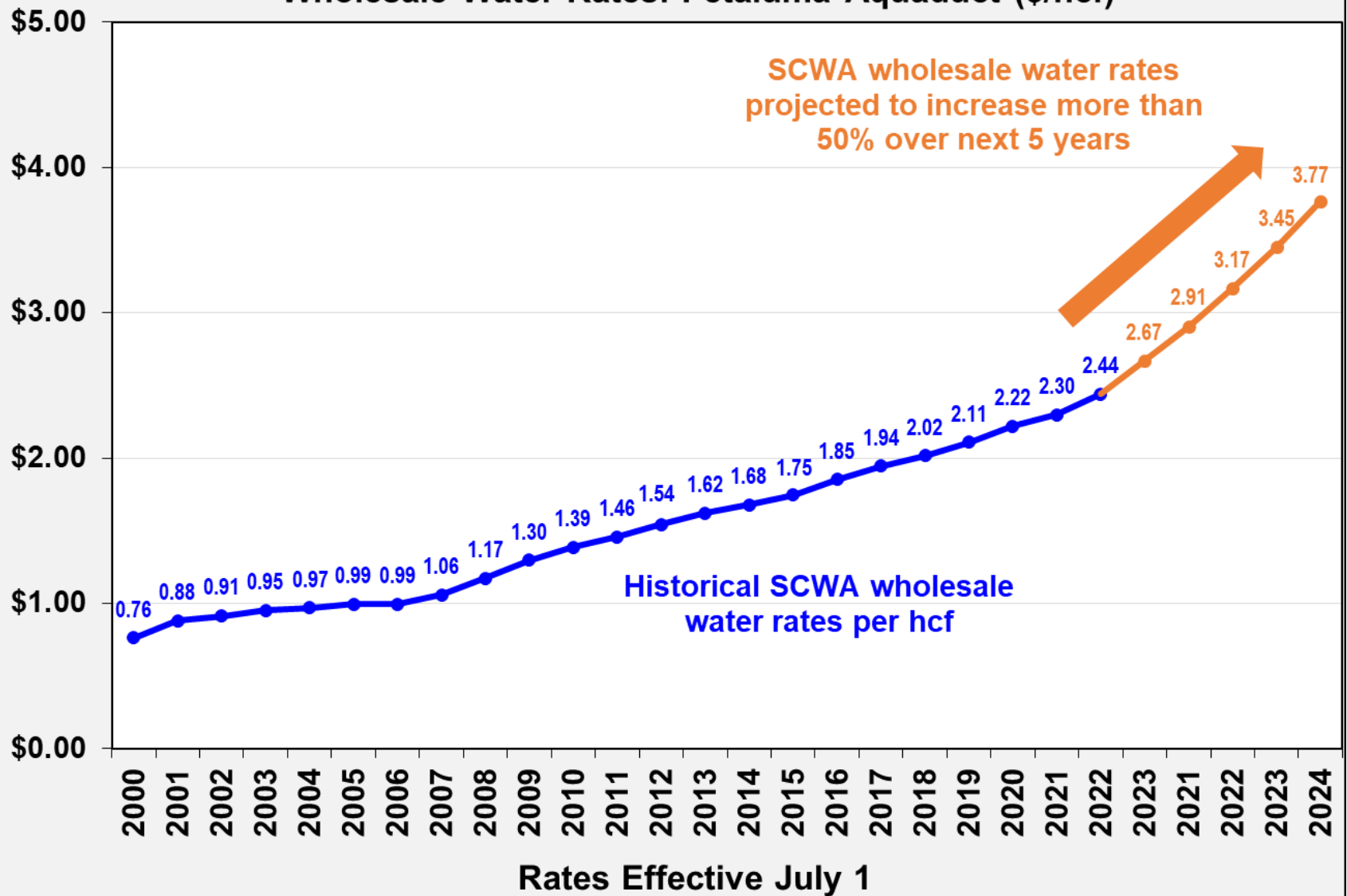
## ■ Keep Up with Cost Inflation

- City faces ongoing inflationary increases for operating & maintenance expenses (utilities, staffing, chemicals, insurance, etc.)
- Annual rate adjustments needed to keep up with cost inflation



# Sonoma County Water Agency

## Wholesale Water Rates: Petaluma Aquaduct (\$/hcf)





# Projected Water Rates

- BWA developed 10-year financial projections to identify future funding needs & evaluate rate increases to support the costs of providing service
- Gradual annual rate increases needed to support water system operating & maintenance expenses, debt requirements, and capital program
- Proposed rate increases phased in over 5 years & include 3 components

➤ **Base City Rate Increases**

Projected Base City Water Rate Increases				
Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
2.5%	2.5%	2.5%	2.5%	2.5%

- **Plus annual pass-through for CPI inflation** (% increase to all water rates)
- **Plus annual pass-through for SCWA wholesale rate increases**  
(\$ per hcf increase to Water Consumption Charges)



Proposed Water Rates						
	Current Water Rates	Proposed Rates Effective On or After				
		Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
FIXED MONTHLY CHARGES						
Fixed monthly charge billed based meter size or per multi-family dwelling unit.						
<b>Residential</b>						
Single Family: Up to 1-inch meter	\$18.98	\$20.03	\$20.54	\$21.05	\$21.58	\$22.11
Multi-Family: Per Dwelling Unit	11.39	12.02	12.32	12.63	12.95	13.27
<b>All Other Customers</b>						
5/8 & 3/4-inch meter	\$18.98	\$20.03	\$20.54	\$21.05	\$21.58	\$22.11
1-inch meter	30.13	31.81	32.60	33.41	34.25	35.10
1-1/2-inch meter	58.02	61.25	62.79	64.35	65.96	67.61
2-inch meter	91.47	96.57	98.98	101.46	103.99	106.58
3-inch meter	169.56	179.01	183.49	188.08	192.79	197.61
4-inch meter	281.10	296.77	304.19	311.79	319.59	327.58
6-inch meter	559.96	591.18	605.96	621.11	636.64	652.56
WATER CONSUMPTION CHARGES						
Volumetric charges billed per hundred cubic feet (hcf) of metered water use.						
<b>Single Family Residential</b>						
Tier 1	0 - 4 hcf	\$4.31	\$4.78	\$4.90	\$5.01	\$5.26
Tier 2	4.01 - 8 hcf	4.79	5.29	5.41	5.54	5.81
Tier 3	8.01 - 16 hcf	5.48	6.02	6.16	6.31	6.62
Tier 4	>16 hcf	6.42	7.01	7.17	7.35	7.71
<b>All Other Customers</b>		4.79	5.29	5.41	5.54	5.81
<b>Temporary Service &amp; Water Haulers</b>		7.18	7.81	8.00	8.19	8.59

Note: Rates shown are subject to additional annual pass-through rate adjustments for inflation starting July 1, 2024 and wholesale water increases.



# Water Rate Impacts

Projected Water Rate Increases with SCWA & Inflation Pass-Throughs					
	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
Base City Rate Increases	2.5%	2.5%	2.5%	2.5%	2.5%
Est. Inflation Pass-Through	3.0%	2.5%	2.5%	2.5%	2.5%
SCWA Wholesale Rate Increase*	\$0.23	\$0.24	\$0.26	\$0.29	\$0.31
Net Increase	8.8%	8.2%	8.3%	8.3%	8.3%

\* Pass-through to Water Consumption Charges only.

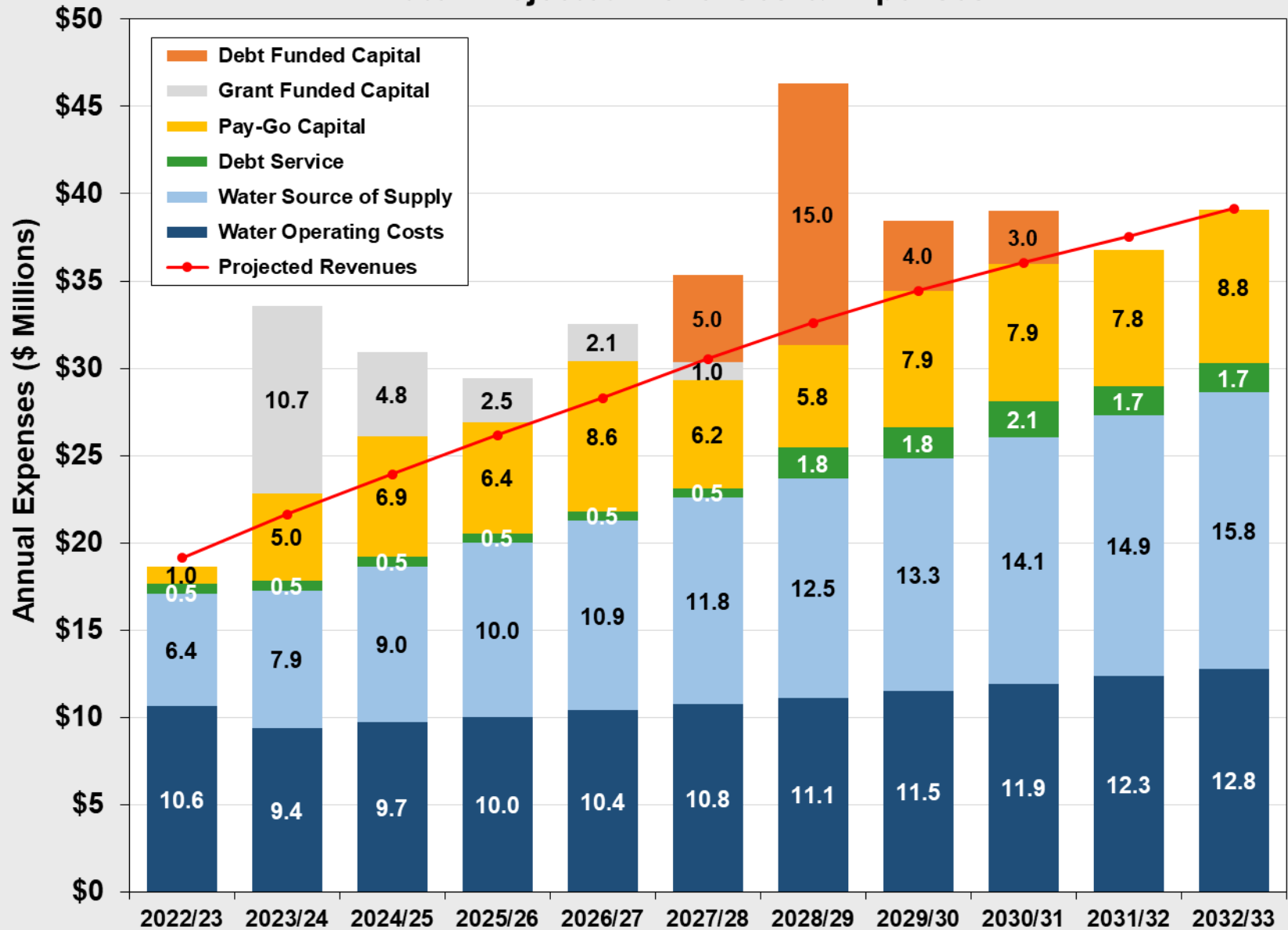
- Projected rate increases shown; actual future increases may vary
- City maintains the flexibility to implement rates lower than authorized

Projected Monthly Water Bills for a Single Family Home							
	Use (hcf)	Current Year	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
Low Use	4	\$36.22	\$39.15	\$42.05	\$45.12	\$48.44	\$51.93
Average Use	7	50.59	55.02	59.39	64.08	69.08	74.40
Mod-High Use	12	77.30	84.39	91.37	98.88	106.88	115.41

Note: Projected bills include base City rate increases plus estimates of future annual pass-through rate adjustments for wholesale water rate increases and inflation.

# City of Petaluma

## Water Projected Revenues & Expenses





# Projected Wastewater Rates

- BWA developed 10-year financial projections to identify future funding needs & evaluate rate increases to support the costs of providing service
- Gradual annual rate increases needed to support sewer system operating & maintenance expenses, debt requirements, and capital program
- Proposed rate increases phased in over 5 years & include 2 components

➤ **Base City Rate Increases**

Projected Base City Wastewater Rate Increases				
Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
2.0%	2.0%	2.0%	2.0%	2.0%

➤ **Plus annual pass-through for CPI inflation**





Proposed Wastewater Rates						
Current Wastewater Rates	Proposed Rates Effective on or After					
	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027	
<b>FIXED MONTHLY CHARGES</b>						
<i>Fixed monthly charges billed per residential dwelling unit or based on non-residential meter size.</i>						
<b>RESIDENTIAL</b>						
<i>Fixed monthly charge per dwelling unit</i>						
Single Family Residential	\$37.93	\$39.85	\$40.64	\$41.46	\$42.29	\$43.14
Multi-Unit Residential	32.24	33.88	34.55	35.24	35.95	36.67
Unmetered Residential	100.88	105.99	108.11	110.27	112.48	114.72
<b>NON-RESIDENTIAL</b>						
<i>Fixed monthly charge based on meter size</i>						
Up to 3/4-inch meter	\$37.93	\$39.85	\$40.64	\$41.46	\$42.29	\$43.14
1-inch meter	62.43	65.59	66.90	68.24	69.61	71.00
1-1/2 inch meter	123.66	129.91	132.51	135.16	137.86	140.62
2-inch meter	197.15	207.12	211.26	215.49	219.79	224.19
<b>WASTEWATER COMMODITY CHARGES</b>						
<i>Volumetric charges billed per hundred cubic feet (hcf) of estimated sewer discharge.</i>						
<b>RESIDENTIAL</b>						
<i>Based on a) average of two lowest of four low use months of metered winter water use or b) actual water use</i>						
Single Family Residential	\$8.99	\$9.45	\$9.63	\$9.83	\$10.02	\$10.22
Multi-Unit Residential	8.99	9.45	9.63	9.83	10.02	10.22
<b>COMMERCIAL</b>						
<i>Billed based on metered water use</i>						
Low Strength	\$8.66	\$9.09	\$9.28	\$9.47	\$9.65	\$9.85
Medium Strength	11.78	12.38	12.63	12.89	13.14	13.41
High Strength	16.01	16.82	17.16	17.50	17.85	18.21
<b>METERED INDUSTRIAL</b>						
<i>Based on metered use &amp; estimated wastewater loadings</i>						
Flow (\$/hcf)	\$7.44	\$7.82	\$7.97	\$8.13	\$8.29	\$8.46
BOD (\$/lb)	1.26	1.33	1.36	1.39	1.42	1.45
SS (\$/lb)	1.43	1.50	1.53	1.57	1.60	1.63



# Wastewater Rate Impacts

## Projected Wastewater Rate Increases with Inflation Pass-Throughs

	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
Base City Rate Increases	2.0%	2.0%	2.0%	2.0%	2.0%
Est. Inflation Pass-Through	3.0%	2.5%	2.5%	2.5%	2.5%
Net Increase	5.1%	4.6%	4.5%	4.5%	4.5%

- Projected rate increases shown; actual future increases may vary
- City maintains flexibility to implement rates lower than authorized

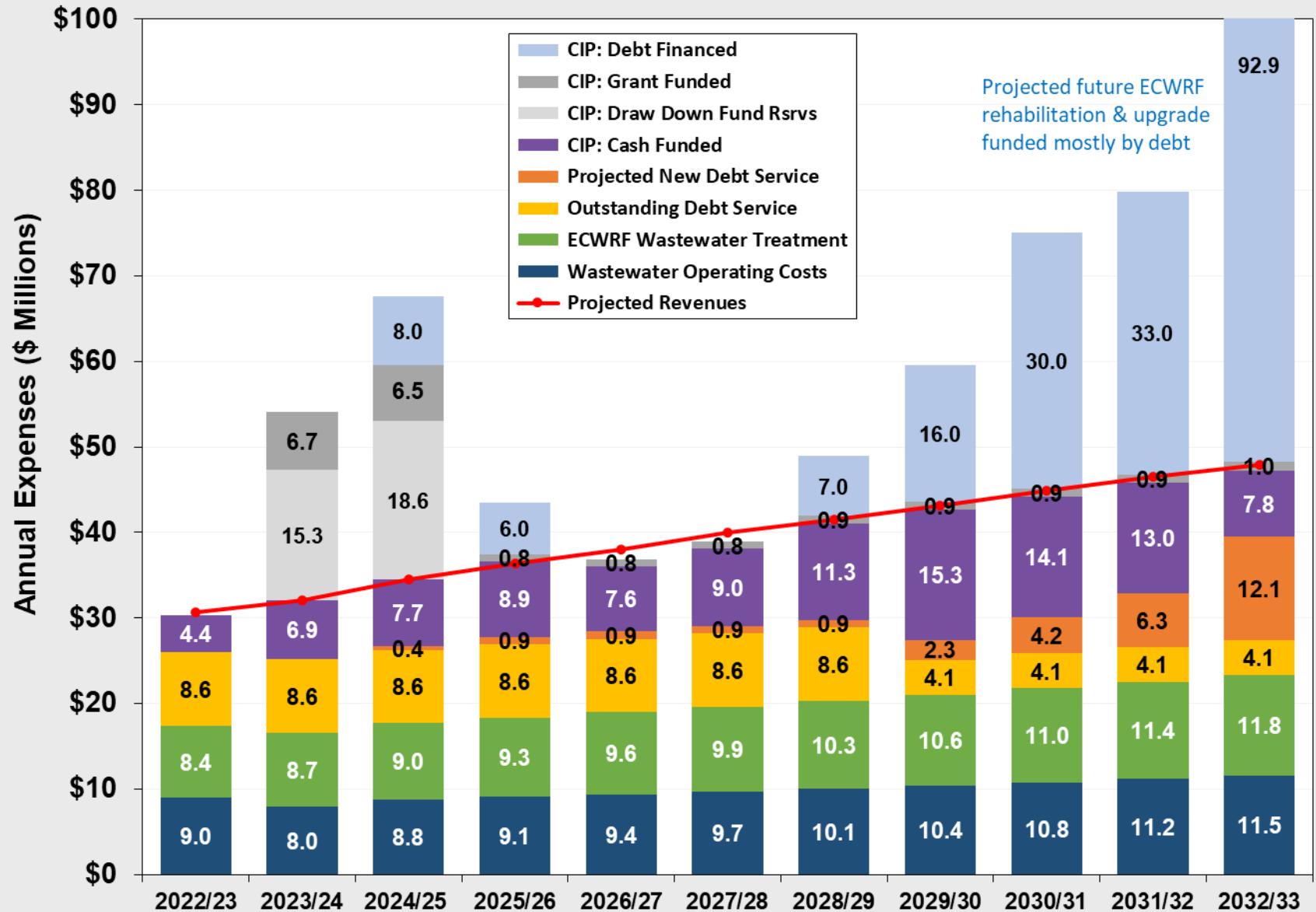
## Projected Monthly Wastewater Bills for a Single Family Home

	Use (hcf)	Current Year	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
Low Use	3	\$64.90	\$68.19	\$71.27	\$74.53	\$77.92	\$81.45
Average Use	5	82.88	87.08	91.02	95.17	99.51	104.01
Mod-High Use	8	109.85	115.41	120.63	126.15	131.88	137.84

Note: Projected bills include base City rate increases plus estimates of future annual pass-through rate adjustments for inflation.

# City of Petaluma

## Wastewater Projected Revenues & Expenses



Projected Monthly Water & Wastewater Bills							
	Use (hcf)	Current Year	Sept 1 2023	July 1 2024	July 1 2025	July 1 2026	July 1 2027
<b>Low Use</b>							
Water	4	\$36.22	\$39.15	\$42.05	\$45.12	\$48.44	\$51.93
Wastewater	3	<u>64.90</u>	<u>68.19</u>	<u>71.27</u>	<u>74.53</u>	<u>77.92</u>	<u>81.45</u>
Total		101.12	107.34	113.32	119.65	126.36	133.38
<b>Typical Use</b>							
Water	7	\$50.59	\$55.02	\$59.39	\$64.08	\$69.08	\$74.40
Wastewater	5	<u>82.88</u>	<u>87.08</u>	<u>91.02</u>	<u>95.17</u>	<u>99.51</u>	<u>104.01</u>
Total		133.47	142.10	150.41	159.25	168.59	178.41
<b>Mod-High Use</b>							
Water	12	\$77.30	\$84.39	\$91.37	\$98.88	\$106.88	\$115.41
Wastewater	8	<u>109.85</u>	<u>115.41</u>	<u>120.63</u>	<u>126.15</u>	<u>131.88</u>	<u>137.84</u>
Total		187.15	199.80	212.00	225.03	238.76	253.25

- Includes base rate increases + projected SCWA water & CPI pass-throughs
- Total rate increases equate to roughly 6.0% - 6.5% per year
- Combined water & wastewater charges expected to remain in middle range
- Other regional agencies are also increasing rates



# Water Shortage Contingency Plan

## Rate Adjustments

- Rate adjustments designed to support financial stability during periods of drought and emergency water shortages
- Adjustments aligned with UWMP Water Shortage Contingency Plan Levels which range from Level 1: 10% shortage to Level 6: >50% shortage
  - Only seeking authorization for Levels 2 through 6 (not Level 1)
- Adjustments developed to support both Water and Wastewater Utilities
- Proposed adjustments would be subject to future Council authorization
  - Adjustments are entirely optional at Council's future discretion, they are not automatic
- Proposed adjustments are maximums
  - City can implement adjustments at or below the maximum levels; alternatives like tiering can be explored
- Goal is to obtain Prop 218 authorization to give Council flexibility to phase in rate adjustments in response to escalating droughts or water shortages

Proposed Maximum Water Shortage Contingency Plan Rate Adjustments					
	Water Shortage Level				
	Level 2	Level 3	Level 4	Level 5	Level 6
Water Shortage or Mandated Reduction	Up to 20%	Up to 30%	Up to 40%	Up to 50%	> 50%
Maximum Rate Adjustment %	8%	16%	27%	41%	62%
Maximum Rate Adjustment* Effective Sept-1, 2023 (\$/hcf)	\$0.42	\$0.85	\$1.43	\$2.17	\$3.28

\* Maximum authorized adjustments would be adjusted on July 1 each year based on the Maximum Rate Adjustment % for each Water Shortage Level multiplied by the uniform Water Consumption Charge implemented each year.

Projected Maximum Wastewater Rate Adjustments for Water Shortages					
	Water Shortage Level				
	Level 2	Level 3	Level 4	Level 5	Level 6
Water Shortage or Mandated Reduction	Up to 20%	Up to 30%	Up to 40%	Up to 50%	> 50%
Maximum Rate Adjustment %	5%	7%	10%	14%	20%
Maximum Rate Adjustment* Effective Sept-1, 2023 (\$/hcf)	\$0.47	\$0.66	\$0.94	\$1.32	\$1.89

\* Maximum authorized adjustments would be adjusted on July 1 each year based on the Maximum Rate Adjustment % for each Water Shortage Level multiplied by the Residential Wastewater Commodity Charge implemented each year.



# LIHWAP Assistance Program

- Petaluma is enrolled in the federally-funded LIHWAP assistance program
- Helps low-income households pay utility bills
- Priority is to maintain or restore service and avoid disconnection due to delinquency and non-payment
- Local LIHWAP program administered by North Coast Energy Services who also administers a similar LIHEAP energy assistance program
- Application info available in English & Spanish at [nces.org](https://nces.org)
  - Click “Applying for Help” and select “Water Assistance Program” in the Applications section
- Can apply once each calendar year
- Info also on City’s website at [cityofpetaluma.org/billing-water-sewer](https://cityofpetaluma.org/billing-water-sewer) or by searching for “Water & Sewer Billing” or by contacting City



**Office of Community Services**

Low-Income Household Water Assistance Program | LIHWAP





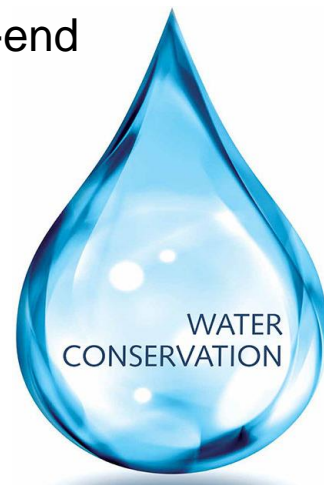
# Water Conservation Programs

**The City of Petaluma offers a variety of water conservation programs and rebates to help our water customers save water and money**

- Free consultations for saving water at home and at work through the Water-Wise HouseCall Program
- Mulch Madness Program - a free turf conversion program for residents and businesses who want to transform their high-water use turf to a drought tolerant mulched landscape
- Rebates for:
  - High-efficiency toilets and clothes washers
  - Pool or spa covers
  - Laundry-to-landscape greywater systems
- How-to guides & resources including how to read your water meter and check for leaks
- Free water saving devices and supplies: low-flow faucet aerators, hose-end nozzles, and shower heads, toilet leak detection tablets, and more

## How to get more information

- Visit the City's website at [cityofpetaluma.org/conserve](http://cityofpetaluma.org/conserve)
- Call the Water Conservation line at (707) 778-4507
- Email [conservation@cityofpetaluma.org](mailto:conservation@cityofpetaluma.org)





# Summary of Key Issues

## ■ Water Rates

- Proposed Increases: 2.5% base City rate increases each year for next 5 years
- Continue City's historical practice of authorizing additional annual pass-throughs for a) SCWA wholesale water rate increases and b) CPI inflation
- **Recycled Water Rates** can be adjusted up to 100% of the potable rate
  - Included with the rate for "All Other Customers" in the Water Consumption Charges

## ■ Wastewater Rates

- Proposed Increases: 2.0% base City rate increases each year for next 5 years
- Continue City's historical practice of authorizing annual pass-through for CPI inflation

## ■ Water Shortage Contingency Plan Rate Adjustments

- Consider authorizing maximum water and wastewater rate adjustments to support financial stability during periods of drought and required cutbacks
- City can phase in surcharges as needed in response to escalating drought conditions
- Alternative rate structures can be explored – up to the proposed caps



# Additional Considerations

## ■ Analysis Conducted to Evaluate Options for Minimizing Rate Increases

- Holistic view - staff carefully reviewed the necessity and criticality of all proposed capital projects
- Goal was to identify what projects, if any, could be deferred to minimize the need for rate increases
- Classified each as (1) Essential, (2) Deferrable with Consequences/risks, or (3) Discretionary

## ■ Considerations & Findings

- The current rate study already includes a refined Capital Improvement Plan that only includes essential and important projects – the goal was to not have to issue bonds, if possible
  - Most projects have a high degree of criticality and must still be done even if deferred
- Project costs will increase as inflation in the utility and heavy construction industry continues to outpace the general Consumer Price Index
- Deferral has already occurred for many projects – criticality continues to increase
- Many projects need to synchronize with other projects to meet City goals and objectives (e.g., street improvement projects need to have water/sewer improvements prior to placing new pavement); therefore, deferrals have trickle-down effects
- Potential risks to the integrity and operability of our water and sewer infrastructure and operations increase with additional deferral of projects; strategy is to be proactive and not reactive
- Operational efficiencies and service enhancements can be achieved with completion of most projects sooner rather than later (e.g., floating solar, increasing recycled water production)



# Additional Considerations (cont'd)

## ■ Second option explored with only a 2% increase in base water rates

- Saves a typical homeowner approximately \$0.30 per month each year (~\$1.50/mo. after 5 years)
- Lower revenues in perpetuity: water utility would have \$650,000 less each year (after 5 years)
- Lower reserves for CIP: water utility would have approximately \$1.8 million less (after 5 years)
- Deferred projects generally still need to get done – at higher cost
- Risk of needing to defer more essential CIP projects
- Risk of not furthering critical goals and initiatives
  - Integrated Water Master Plan – crafting a vision for water supply and drought resiliency
- Larger rate increase is likely in 2028 and beyond
- Even with adoption of the recommended 2.5% base rate increase cap this evening, Council has flexibility in adopting lower rates each year depending on updated projections and circumstances

## ■ Big picture financial considerations

- CIP projects are intended to fulfill the goals and vision set by Council for the community
  - Plan is to continue utilizing fund balances to pay for CIP projects (“pay-as-you-go”) identified in master plans
  - Must maintain system in a manner that meets requirements, fulfills goals/vision, and ensures reliability/integrity
  - Significant funds are needed within 2-3 years; bonding may still be necessary - to be evaluated in the future
- Operating revenues are currently healthy, and must be maintained per the utility reserve policy
  - Water – 25% of the O&M budget plus \$4 million in CIP reserves
  - Wastewater – 25% of the O&M budget plus \$8 million in CIP reserves
  - Important to maintain exceptional bond rating, which ensures lowest possible interest rates



# Proposition 218 Notice

## ■ City has gone above and beyond minimum legal requirements for its Proposition 218 Notice

- Notice was sent to both property owners and customers of record
  - Distributed to other community members as well
- In addition to providing required info on proposed rates and public hearing, the notice also provided:
  - Instructions for how to submit a “written protest”
  - Info on City’s water conservation programs
  - Info on the LIHWAP assistance program
- Cover sheet provided in both English & Spanish
- Both English & Spanish versions of the notice were available on the City’s website
- Informational meeting held on Monday, July 31, 2023

The image displays two versions of a Proposition 218 notice from the City of Petaluma, Sonoma County. The top version is in English, titled "WATER & WASTEWATER RATE INCREASE BEING PROPOSED". It explains that water and wastewater service affects everyone's daily life and that the city is proposing a rate increase to maintain and improve services. It lists key areas: Daily Operations, Replacement of Aging Infrastructure, System Maintenance & Repairs, Water Conservation, and Drought Resiliency Projects & Programs. It provides a link to learn more: [cityofpetaluma.org/tarifadelagua](http://cityofpetaluma.org/tarifadelagua). The bottom version is in Spanish, titled "SE HA PROPUESTO UN AUMENTO DE TARIFAS EN LOS SERVICIOS DE AGUA Y AGUAS RESIDUALES". It explains that the municipal water and sewer service affects everyone's daily life and that the city is proposing a rate increase to maintain and improve services. It lists key areas: Las operaciones diarias, El mantenimiento y la reparación del sistema, and El reemplazo de infraestructura obsoleta. It provides a link to learn more: [cityofpetaluma.org/waterbill](http://cityofpetaluma.org/waterbill). Both versions include a "¿LE GUSTARÍA SABER MÁS?" section with instructions on how to learn more, including visiting the city website, contacting the City Hall, or attending a public hearing.

# Next Steps

- **Tonight (August 7, 2023) – Hear public comment and consider adoption of the resolutions approving the proposed rates**
  - Notices of proposed rates were mailed to all property owners & customers
  - As required, the Public Hearing is 45 days after notices were mailed
  - Rate increases are subject to “majority protest”; City cannot take action if written protests are received for more than 50% of parcels
- **Adoption of these resolutions authorizes Council to charge up to the proposed rates (i.e., rates are not-to-exceed; less is always an option)**
- **If adopted, new rates would become effective starting September 1, 2023 and on July 1 of subsequent years**



# Questions & Discussion

